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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/799,671

**Applicant(s)**

MUTIKAINEN ET AL.

**Examiner**

BEN H. LIU

**Art Unit**

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 14-35, 37-43 and 45-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-35, 37-43 and 45-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 11 May, 2009.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This is in response to an amendment/response filed on July 10<sup>th</sup>, 2009.
2. Claims 1, 35, 43, and 54-58 have been amended.
3. No claims have been cancelled.
4. No new claims have been added.
5. Claims 1-12, 14-35, 37-43, and 45-59 are currently pending.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-10, 14-35, 37-43, and 45-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyllander et al. (U.S. Patent 7,065,199) in view of Chaney et al. (U.S. Patent 7,184,415).

**For claim 1**, Hyllander et al. disclose a method comprising:

transmitting via a data path a call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network *(see column 2 lines 57-63 and figure 2, which recite transmitting a connection request to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9);*

receiving at the user terminal via the data path a temporary routing number as a call routing number for the requested call service, the temporary routing number received in response

to the call request (*see column 3 lines 1-7, which recite the subscriber that receives a server's telephone number as a temporary routing number*);

establishing a circuit-switched call leg connection from the user terminal to a packet-switched network via a circuit-switched network (*see figure 2, which recite a user terminal 8 that establishes a circuit-switched call leg to the packet-switched network 3 via circuit-switched GSM network 9*), using the temporary routing number as the routing number for the requested call service (*see column 3 lines 8-14, which recite establishing the connection from the user terminal to a packet-switched network by calling a number provided by application server, wherein the number provided by the application server functions as a temporary routing number*), wherein the circuit-switched call leg connection is used for providing a packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*); and

using the received temporary routing number to set up the circuit-switched call leg as a call leg of the call service (*see column 3 lines 8-14 and figure 2, which recite the subscriber terminal 8 that establishes a circuit-switched call leg to the GSM network 9 by calling the provided server telephone number*).

Hylander et al. discloses establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network, wherein the call connection may connect a user at mobile station 8 to a user at user terminal 7 (*see figure 2*). Hylander et al. disclose all the subject matter of the claimed invention with the exception wherein the call service is a conference call service between more than two users. However, Chaney et al. from the same or

similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*) that includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the modified conference server 152 as taught by Chaney et al. to invite two or more participants to a conference call with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by installing the modified conference server 152 as taught by Chaney et al. with the network of the conference service and method as taught by Hyllander et al. The motivation for using the modified conference server that provides a conference service to multiple participants as suggested by Chaney et al. (*see column 2 lines 28-32*) with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the accessibility of the system by providing access to the conference service when the user does not know the network ID of the server that provides such services.

**For claim 2**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the receiving comprises receiving a routing number comprising an E.164 number (*see column 2 lines 57-63, which recite delivering the server telephone number as the routing number*).

**For claim 3**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the delivering step comprises performing using at least one session initiation protocol session setup message. Chaney et al. from the same or similar fields of

endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 4**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the session initiation protocol session is kept active during the circuit-switched call. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*) for the duration of the call (*see column 12 lines 19-23*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney

et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 5**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising detecting whether the circuit-switched call leg is supported by the user terminal and the packet-switched network before the delivering step (*see column 3 lines 61-62, which recite determining whether a call connection is possible*).

**For claim 6**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the detecting comprises performing within a registration procedure (*see column 3 lines 52-62, which recite determining whether a call connection is possible when a call request is registered*).

**For claim 7**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, wherein the establishing comprises establishing the circuit-switched call leg comprising a call leg from an originating call (*see column 3 lines 8-14, which recite receiving a circuit-switched call from the originating caller*).

**For claim 8**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the establishing step comprises establishing the circuit-switched call leg comprising a call leg from a terminating call (*see figure*



*1, which recite establishing a connection to a terminating telephone 2 on a circuit-switched PSTN network).*

**For claim 9**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, wherein the receiving step comprises delivering the routing number to the user terminal from a call control element of the packet-switched network (*see column 3 lines 1-7, which recite delivering a routing number from a telephony/internet server*).

**For claim 10**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the establishing comprises locating the user terminal outside a home network of the user terminal. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that facilitates communication between terminals that are outside of their home networks (*see figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to facilitate communication between terminals outside of their home networks as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. Communication between terminals outside of their home networks can be implemented by installing a Presence and Instant Messaging (PIM) server 18 as taught by Chaney et al. in the IP network to forward messages to mobile terminals outside of their home networks. The motivation for facilitating communication between terminals outside of their home network with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality

of the network by allowing the network to provide services to a terminal by only knowing its network ID.

**For claim 14**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising the step of selecting participants of the call and adding to the call request an information specifying the selected participants (*see column 2 lines 57-63, which recite a connection request specifying the participants*).

**For claim 15**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the transmitting comprises performing based on a pre-configured address information (*see column 8 lines 32-34, which recite transmitting the specific address of the subscriber and Internet user*).

**For claim 16**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising setting the pre-configured address information in a service subscription stage (*see column 8 lines 27-34, which recite transmitting the specific address of the subscriber and Internet user while requesting for a connection*).

**For claim 17**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising adding session-related information to the call request, the session-related information comprising at least one of a subject: picture of the subject, payer of the call, importance of the call session, animation, video clip, sound clip, and textual description (*see column 2 lines 57-63, which recite transmitting a connection request with a textual description*).

**For claim 18**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the transmitting comprises transmitting via the data path comprising a short message service channel (*see column 2 lines 27-30, which recite using a SMS channel*).

**For claim 19**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the transmitting step comprises transmitting via the data path that comprises a unstructured supplementary service data, wireless application protocol, or hyper text transfer protocol channel (*see column 10 lines 43-55, which recite transmitting along a data path using GSM alternate speech/data services*).

**For claim 20**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the transmitting and receiving steps comprise using session initiation protocol. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing

terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 21**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the transmitting and receiving steps comprise performing using at least one session initiation protocol or service description protocol extension for communicating circuit-switched specific information. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 22**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the providing step comprises setting up the circuit-switched connection to a media gateway control device which then routes

the circuit-switched call to the application server (*see column 8 lines 10-20, which recite a server that receives a circuit-switched call from a subscriber and transfers that call to an Internet user*).

**For claim 23**, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising converting the routing number into a packet-switched call address at the media gateway control device (*see column 8 lines 10-20, which recite associating a telephone number with an Internet address to allow for a connection between the two networks*).

**For claim 24**, Hyllander et al. disclose all the subject matter of the claimed invention but does not explicitly disclose reserving the routing number as a temporary conference routing number at the application server during establishment of the conference call; and releasing the routing number for reuse after releasing the conference call. However, Hyllander et al. disclose a system for establishing a connection between a circuit-switched network and packet-switched network that provides a telephone number for subscribers to access conference calls hosted by the server (*see column 2 lines 57-63*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to designate telephone numbers to serve specific conference calls. Specific telephone numbers can be used with the server that hosts conference calls by configuring the server to accept and manage a calls made to a pool of telephone numbers allocated to the server. The motivation for using a specific telephone numbers is to increase the capacity of the server by allowing the reuse of telephone numbers.

**For claim 25**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception that the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding a join request to join the

conference call from the application server to other participants specified in the conference request via a data path. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is transmitted using a SIP INVITE message (*see column 5 lines 22-31*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 26**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the forwarding comprises transmitting the request using a session initiation protocol invite message triggered by a received session initiation protocol refer message. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is transmitted using a SIP INVITE message (*see column 5 lines 22-31*). Thus, it would have been obvious to the person of ordinary

skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 27**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the forwarding comprises forwarding the join request, the join request comprising: at least one of an identification of the conference initiator; a subject of the conference call; a price of the conference call leg; and an information about a moderation of the conference call, an animation, a video clip, a sound clip, and a textual description. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is transmitted using a SIP REFER message that includes a textual description (*see column 8 lines 55-64*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP

control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 28**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding, via another data path, the conference routing number from the application server to a requested participant specified in the conference request to indicate that the conference call will be established from the conference number to the requested participant, wherein at least one circuit-switched connection is set up from the application server using the conference number as a calling party number via a media gateway control device, which then routes the conference call to the requested participant. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is transmitted using a SIP INVITE message to another participant (*see column 5 lines 22-31*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by



Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 29**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding a kick-out request to the application server via the data path to have a participant excluded from the conference call. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The SIP standard provides a BYE message that allows established connections to be terminated thus excluding the user of the terminated connection from the conference. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control

with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 30**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding the kick-out request, said kick-out request comprises an identification of the conference call and an identification of at least one the participant to be excluded. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The SIP standard provides a BYE message that allows established connections to be terminated thus excluding the user of the terminated connection from the conference. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 31,** Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the receiving comprises receiving the temporary routing number for the call, the call supports at least one of: an audio component, a non-real time video component; an application component; and a messaging component (*see column 2 lines 43-56, which recite establishing a telephony/Internet connection*).

**For claim 32,** Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the connection set-up comprises a call policy control protocol over an Mt interface as a data path (*see column 3 lines 52-62, which recite a server that implements call policies by storing and assigning an address list, server telephone number, and information that the call connection is possible*).

**For claim 33,** Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises the steps of forwarding, via another data path, a join request to join the conference call from a requesting participant to at least one requested participant specified in the conference request, wherein the join request comprises the conference routing number and a connection setup step comprises setting up a circuit-switched connection from the at least one requested participant to application server using the conference routing number. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is forwarded to all the participants (*see column 9 lines 11-14*). Thus, it would have been obvious to the person of

ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 34**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding the request using a session initiation protocol Refer message and the connection setup step comprises establishing the at least one circuit-switched connection using session initiation protocol Invite message. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request comprises SIP REFER messages that are forwarded to all the participants (*see column 9 lines 11-14*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as

taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 35**, Hyllander et al. disclose an apparatus comprising:

a transmitter configured to transmit via a data path a call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite transmitting a connection request to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*);

a communicator configured to receive at the user terminal via the data path a temporary routing number as a call routing number for the requested call service, the temporary routing number received in response to the call request (*see column 3 lines 1-7, which recite the subscriber that receives a server's telephone number as a temporary routing number*);

an establisher configured to establish a circuit-switched call leg connection from the user terminal to a packet-switched network via a circuit-switched network (*see figure 2, which recite a user terminal 8 that establishes a circuit-switched call leg to the packet-switched network 3 via*

*circuit-switched GSM network 9), using the temporary routing number as the routing number for the requested call service (see column 3 lines 8-14, which recite establishing the connection from the user terminal to a packet-switched network by calling a number provided by application server, wherein the number provided by the application server functions as a temporary routing number), wherein the circuit-switched call leg connection is used for providing a packet-switched call service to the circuit-switched network (see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9); and*

a processor configured to use the received temporary routing number to set up the circuit-switched call leg as a call leg of the call service (*see column 3 lines 8-14 and figure 2, which recite the subscriber terminal 8 that establishes a circuit-switched call leg to the GSM network 9 by calling the provided server telephone number*).

Hyllander et al. discloses establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network, wherein the call connection may connect a user at the mobile station 8 to a user at a user terminal 7 (*see figure 2*). Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the call service is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*) that includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the modified conference server 152 as taught by Chaney et al. to invite two or

more participants to a conference call with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by installing the modified conference server 152 as taught by Chaney et al. with the network of the conference service and method as taught by Hyllander et al. The motivation for using the conference system and method in a telecommunications network including a modified conference server that provides a conference service to multiple participants as suggested by Chaney et al. (*see column 2 lines 28-32*) with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the accessibility of the system by providing access to the conference service when the user does not know the network ID of the server that provides such services.

**For claim 37**, Hyllander et al. disclose a terminal device for establishing a connection between a circuit-switched network and packet-switched network wherein the communication means is configured to use a short message service channel for forwarding the call request (*see column 2 lines 27-30, which recite using a SMS channel*).

**For claim 38**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the communication means is configured to use a session initiation protocol message for forwarding the conference request. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-

switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 39,** Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the communication means is configured to use at least one session initiation protocol or service description protocol extension for communicating circuit-switched specific information. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the



functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 40**, Hyllander et al. disclose a terminal device for establishing a connection between a circuit-switched network and packet-switched network wherein the communication means and the establishing means are integrated in a telephony application of the terminal device *(see column 2 lines 4-11, which recite a SMS communication means used to establish a connection that is integrated in the mobile terminals)*.

**For claim 41**, Hyllander et al. disclose a terminal device for establishing a connection between a circuit-switched network and packet-switched network wherein a call application is implemented as a native client application or as a midlet application *(see column 2 lines 4-11, which recite a SMS communication means used to establish a call that is integrated in the mobile terminals)*.

**For claim 42**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the communicator is configured to transmit the conference request in consequence of receiving a first request from another user. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network *(see abstract)* that utilizes SIP control signaling for call setup and call control *(see column 2 lines 36-45)*. The terminal transmits a conference request SIP REFER message 103 in response to a first conference request SIP REFER message 102 *(see figure 5)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by

Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 43**, Hyllander et al. disclose an apparatus comprising:

a communicator configured to receive a call request via a data path, the call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite receiving a connection request directed to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*);

a deliverer configured to deliver, in response to the call request, a temporary routing number to the user terminal for the circuit-switched network via the data path (*see column 3 lines 1-7, which recite the transmitting a server's telephone number as a temporary routing number*),

wherein the connection from the packet-switched network to the circuit-switched network is used to provide the packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*), the temporary routing number comprising a routing number

configured as an E.164 number (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

Hyllander et al. discloses establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network, wherein the call connection may connect a user at the mobile station 8 to a user at a user terminal 7 (*see figure 2*). Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the call service is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*) that includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the modified conference server 152 as taught by Chaney et al. to invite two or more participants to a conference call with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by installing the modified conference server 152 as taught by Chaney et al. with the network of the conference service and method as taught by Hyllander et al. The motivation for using the conference system and method in a telecommunications network including a modified conference server that provides a conference service to multiple participants as suggested by Chaney et al. (*see column 2 lines 28-32*) with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the accessibility of the system by providing access to the conference service when the user does not know the network ID of the server that provides such services.

**For claim 45**, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network, further comprising allocating means for allocating said call routing number as a temporary E.164 number to said call (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

**For claim 46**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein said allocator is configured to reserve a plurality of E.164 numbers for a plurality of conference calls. However, Hyllander et al. disclose a system for establishing a connection between a circuit-switched network and packet-switched network that provides a telephone number for subscribers to access conference calls hosted by the server (*see column 2 lines 57-63*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use a plurality of telephone numbers to host a plurality of conference calls. A plurality of telephone numbers can be used with the server that hosts conference calls by configuring the server to accept calls made to a plurality of telephone numbers. The motivation for using a plurality of telephone numbers is to increase the functionality of the server to handle a plurality of conference calls.

**For claim 47**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein said reserved plurality of E.164 numbers comprises a plurality of toll-free numbers and a plurality of charged numbers. However, Hyllander et al. disclose a system for establishing a connection between a circuit-switched network and packet-switched network that provides a telephone number for subscribers to access conference calls hosted by the server (*see column 2 lines 57-63*). The telephone numbers can be either toll-free numbers or charged numbers. Thus, it would have been obvious to the person of ordinary skill in the art at

the time of the invention to use a plurality of toll-free and charged telephone numbers to host a plurality of conference calls. A plurality of toll-free and charged telephone numbers can be used with the server that hosts conference calls by configuring the server to accept calls made to a plurality of telephone numbers. The motivation for using a plurality of toll-free and charged telephone numbers is to increase the functionality of the server to handle a plurality of conference calls.

**For claim 48,** Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein said allocator is configured to select said E.164 number from said plurality of charged numbers included in said conference request. However, Hyllander et al. disclose a system for establishing a connection between a circuit-switched network and packet-switched network that provide a telephone number for subscribers to access conference calls hosted by the server (*see column 2 lines 57-63*). The telephone numbers can be either toll-free numbers or charged numbers. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to select a number from a plurality of charged telephone numbers to host a plurality of conference calls. A plurality of charged telephone numbers can be used with the server that hosts conference calls by configuring the server to accept calls made to a plurality of telephone numbers. The motivation for using a plurality of charged telephone numbers is to increase the functionality of the server to handle a plurality of conference calls.

**For claim 49,** Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network wherein said communication means is configured to send a call routing number via a respective data path to other participants

specified in a call request (*see column 3 lines 1-7, which recite sending a server's telephone number as a temporary routing number*).

**For claim 50**, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network, further comprising: checker configured to control whether callers of received calls relating to said call match with said other participants specified in said call request (*see column 8 lines 44-50, which recite identifying the calling party and associating the telephone call with a previously determined Internet address requested by the calling party*).

**For claim 51**, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises a connection controller configured to control individual call legs of participants in a media gateway device. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The SIP standard provides a INVITE, REFER, and BYE message that allows individual call legs to be manage. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control

with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

**For claim 52**, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network, further comprising an interface configured to provide a direct connection to a media gateway control device to enable routing of a set-up call for a call from said circuit-switched network to an application server (*see column 8 lines 44-51, which recite a server that forwards a call from a calling party to an Internet address*).

**For claim 53**, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network, further comprising an implementer configured to implement media gateway controller functions in the said server device (*see column 8 lines 44-51, which recite a server that performs the functions of a gateway controller to setup and maintain connections between a circuit-switched network and packet-switched network*).

**For claim 54**, Hyllander et al. discloses a computer program embodied on a computer-readable medium, the computer program configured to control a processor to perform operations comprising:

transmitting via a data path a call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite transmitting a*

*connection request to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9);*

receiving a temporary routing number at the user terminal via the data path as a routing number for the requested call service, the temporary routing number received in response to the call request (*see column 3 lines 1-7, which recite the subscriber that receives a server's telephone number as a temporary routing number*);

establishing a circuit-switched call leg connection from the user terminal to a packet-switched network via a circuit-switched network (*see figure 2, which recite a user terminal 8 that establishes a circuit-switched call leg to the packet-switched network 3 via circuit-switched GSM network 9*) using the temporary routing number as the routing number for the requested call service (*see column 3 lines 8-14, which recite establishing the connection from the user terminal to a packet-switched network by calling a number provided by application server, wherein the number provided by the application server functions as a temporary routing number*), wherein the circuit-switched call leg connection is used for providing a packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*); and

using the received temporary routing number to set up the circuit-switched call leg as a call leg of the call service (*see column 3 lines 8-14 and figure 2, which recite the subscriber terminal 8 that establishes a circuit-switched call leg to the GSM network 9 by calling the provided server telephone number*).



Hyllander et al. discloses establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network, wherein the call connection may connect a user at the mobile station 8 to a user at a user terminal 7 (*see figure 2*). Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the call service is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*) that includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the modified conference server 152 as taught by Chaney et al. to invite two or more participants to a conference call with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by installing the modified conference server 152 as taught by Chaney et al. with the network of the conference service and method as taught by Hyllander et al. The motivation for using the conference system and method in a telecommunications network including a modified conference server that provides a conference service to multiple participants as suggested by Chaney et al. (*see column 2 lines 28-32*) with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the accessibility of the system by providing access to the conference service when the user does not know the network ID of the server that provides such services.

**For claim 55**, Hyllander et al. discloses a computer program embodied on a computer-readable medium, the computer program configured to control a processor to perform operations comprising:

receiving a call request via a data path, the call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite receiving a connection request directed to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*); and

deliver, in response to the call request, a temporary routing number to the user terminal device for the circuit-switched network via the data path (*see column 3 lines 1-7, which recite the transmitting a server's telephone number as a temporary routing number*), wherein the connection from a packet-switched network to the circuit-switched network is used to provide the packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*), the temporary routing number comprising a routing number configured as an E.164 number (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

Hyllander et al. discloses establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network, wherein the call connection may connect a user at the mobile station 8 to a user at a user terminal 7 (*see figure 2*). Hyllander et al. disclose all

the subject matter of the claimed invention with the exception wherein the call service is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*) that includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the modified conference server 152 as taught by Chaney et al. to invite two or more participants to a conference call with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by installing the modified conference server 152 as taught by Chaney et al. with the network of the conference service and method as taught by Hyllander et al. The motivation for using the conference system and method in a telecommunications network including a modified conference server that provides a conference service to multiple participants as suggested by Chaney et al. (*see column 2 lines 28-32*) with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the accessibility of the system by providing access to the conference service when the user does not know the network ID of the server that provides such services.

**For claim 56,** Hyllander et al. discloses an apparatus, comprising:

transmission means for transmitting via a data path a call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2*,

*which recite transmitting a connection request to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9);*

communication means for receiving a temporary routing number at the user terminal via the data path as a routing number for the requested call service, the temporary routing number received in response to the call request (*see column 3 lines 1-7, which recite the subscriber that receives a server's telephone number as a temporary routing number*); and

establishing means for establishing a circuit-switched call leg connection from the user terminal to a packet-switched network via a circuit-switched network (*see figure 2, which recite a user terminal 8 that establishes a circuit-switched call leg to the packet-switched network 3 via circuit-switched GSM network 9*) using the temporary routing number as the routing number for the requested call service (*see column 3 lines 8-14, which recite establishing the connection from the user terminal to a packet-switched network by calling a number provided by application server, wherein the number provided by the application server functions as a temporary routing number*), wherein the connection is used for providing a packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*); and

processing means for using the received temporary routing number to set up the circuit-switched call leg as a call leg of the call service (*see column 3 lines 8-14 and figure 2, which recite the subscriber terminal 8 that establishes a circuit-switched call leg to the GSM network 9 by calling the provided server telephone number*).

Hyllander et al. discloses establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network, wherein the call connection may connect a user at the mobile station 8 to a user at a user terminal 7 (*see figure 2*). Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the call service is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*) that includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the modified conference server 152 as taught by Chaney et al. to invite two or more participants to a conference call with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by installing the modified conference server 152 as taught by Chaney et al. with the network of the conference service and method as taught by Hyllander et al. The motivation for using the conference system and method in a telecommunications network including a modified conference server that provides a conference service to multiple participants as suggested by Chaney et al. (*see column 2 lines 28-32*) with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the accessibility of the system by providing access to the conference service when the user does not know the network ID of the server that provides such services.

**For claim 57**, Hyllander et al. discloses an apparatus, comprising:

communication means for receiving, call request via a data path, the call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite receiving a connection request directed to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*); and

delivering means for delivering, in response to the call request, a temporary routing number to the user terminal for the circuit-switched network via the data path (*see column 3 lines 1-7, which recite the transmitting a server's telephone number as a temporary routing number*), wherein the connection from a packet-switched network to the circuit-switched network is used to provide the packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*), the temporary routing number comprising a routing number configured as an E.164 number (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

Hyllander et al. discloses establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network, wherein the call connection may connect a user at the mobile station 8 to a user at a user terminal 7 (*see figure 2*). Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the call service is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications

network (*see abstract*) that includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the modified conference server 152 as taught by Chaney et al. to invite two or more participants to a conference call with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by installing the modified conference server 152 as taught by Chaney et al. with the network of the conference service and method as taught by Hyllander et al. The motivation for using the conference system and method in a telecommunications network including a modified conference server that provides a conference service to multiple participants as suggested by Chaney et al. (*see column 2 lines 28-32*) with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the accessibility of the system by providing access to the conference service when the user does not know the network ID of the server that provides such services.

**For claim 58**, Hyllander et al. discloses a method, comprising:

receiving call request via a data path, the call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network(*see column 2 lines 57-63 and figure 2, which recite receiving a connection request directed to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*); and

delivering, in response to the call request, a temporary routing number to the user terminal for the circuit-switched network via the data path (*see column 3 lines 1-7, which recite the transmitting a server's telephone number as a temporary routing number*), wherein the connection from a packet-switched network to the circuit-switched network is used to provide the packet-switched call service to said the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*), the temporary routing number comprising a routing number configured as an E.164 number (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

Hyllander et al. discloses establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network, wherein the call connection may connect a user at the mobile station 8 to a user at a user terminal 7 (*see figure 2*). Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein the call service is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*) that includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the modified conference server 152 as taught by Chaney et al. to invite two or more participants to a conference call with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by installing the modified conference



server 152 as taught by Chaney et al. with the network of the conference service and method as taught by Hyllander et al. The motivation for using the conference system and method in a telecommunications network including a modified conference server that provides a conference service to multiple participants as suggested by Chaney et al. (*see column 2 lines 28-32*) with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the accessibility of the system by providing access to the conference service when the user does not know the network ID of the server that provides such services.

10. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyllander et al. (U.S. Patent 7,065,199) and of Chaney et al. (U.S. Patent 7,184,415) as applied to claims 1 and further in view of Hirni et al. (U.S. Patent 6,731,609).

**For claim 11**, Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the method for establishing a connection between a circuit-switched network and packet-switched network further comprises the step of converting the circuit-switched call leg into a voice-over internet protocol connection in a core network of the packet-switched network. Hirni et al. from the same or similar fields of endeavor disclose a telephony system for conducting multimedia telephonic conferences between a packet-based network and circuit-switched PSTN network (*see abstract*) that provides calls using VOIP (*see column 3 lines 52-67*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to deploy a telephony system using VOIP as taught by Hirni et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chaney et al. A telephony system using

VOIP can be implemented by installing agent systems 18 to handle multimedia telephone calls as taught by Hirni et al. with the in the IP network. The motivation for using a VOIP voice telephony system with the method for establishing a connection between a circuit-switched network and packet-switched network is to reduce the cost of the system for users.

**For claim 12**, Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception wherein the establishing step comprises performing using integrated services digital network user part. Hirni et al. from the same or similar fields of endeavor disclose a telephony system for conducting multimedia telephonic conferences between a packet-based network and circuit-switched PSTN network (*see abstract*) that provides calls using ISDN (*see column 14 lines 35-46*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to deploy a telephony system using ISDN as taught by Hirni et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chaney et al. A telephony system using ISDN can be implemented by providing a Q.931 module to handle the ISDN connection control protocol as by Hirni et al. in the server system. The motivation for using a ISDN telephony system with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the compatibility of the network with various subscriber access means.

11. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyllander et al. (U.S. Patent 7,065,199) and of Chaney et al. (U.S. Patent 7,184,415) as applied to claims 1 and further in view of Kaczmarczyk et al. (U.S. Patent 6,775,269).

**For claim 59**, Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the method for establishing a connection between a circuit-switched network and packet-switched network further comprises controlling individual call legs of participants in a media gateway device. Kaczmarczyk et al. from the same or similar fields of endeavor disclose a method and system for routing telephone calls between a circuit-switched PSTN network 12 and packet-switched network 14 through a Media Gateway 18 (*see abstract and figure 1*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to deploy the media gateway 18 to establish calls between a circuit-switched PSTN network 12 and packet-switched network 14 as taught by Kaczmarczyk et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chaney et al. The media gateway 18 as taught by Kaczmarczyk et al. can be implemented by using the media gateway 18 in place of the telephony/Internet server 11 as taught by Hyllander et al. The motivation for using media gateway 18 as suggested by Kaczmarczyk et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the routing of telephone calls (*see column 2 lines 26-30*).

#### ***Response to Arguments***

12. The Applicant submitted After-Final proposed amendments and remarks on May 11<sup>th</sup>, 2009. In response, an Advisory Action was mailed to the Applicant on June 1<sup>st</sup>, 2009. No additional amendments or remarks have been received from the Applicant. Therefore, the

amendments submitted by the Applicant on May 11<sup>th</sup>, 2009 have been entered with the Request for Continued Examination filed on July 10<sup>th</sup>, 2009.

13. The Applicant has amended claims 1, 35, 43, and 54-58. It is noted with appreciation that the Applicant has carefully considered the previous Office Action and the cited prior art references. However, the Applicant's arguments filed July 10<sup>th</sup>, 2009 regarding the 35 USC 103(a) rejections have been fully considered but are not persuasive.

In the Applicant's remarks filed on May 11<sup>th</sup>, 2009, the Applicant asserts that the amended claims are not taught by the cited prior art. First, the Applicant argues that, "Hyllander is completely silent with respect to any mechanism for transmitting a conference request to an application server" (*see Applicant's remarks, page 21*). The Applicant similarly argues that, "nor does Hyllander's user terminal have any mechanism for receiving a temporary routing number for a conference call" (*see Applicant's remarks, page 22*). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It is noted that Hyllander et al. discloses a telephony/Internet application server 11 that provides a connection between user terminal on a circuit-switched network and a terminal on a packet-switched network (see Hyllander et al., figure 2). The application server 11 receives a call request via SMS from the user terminal indicating the internet address of a desired callee (see Hyllander et al., column 2 lines 57-63). In response to the call request, application server 11

transmits a SMS that provides a telephone number used to temporarily route a call request (see Hyllander et al., column 3 lines 1-7). That is, Hyllander et al. discloses a call request implemented as a SMS message to establish a call between mobile terminal 8 and user terminal 7 (see figure 2). Therefore, Hyllander et al. discloses a call request to an application server.

Chaney et al. disclose a conference server 152 that provides a conference service to users using Internet addresses by allowing multiple participants to join a conference call (see Chaney et al., figure 8). The requesting and establishing of a call between a user terminal and the application server as taught by Hyllander et al. can be performed for each user terminal and then combined using the conference call server 152 as taught by Chaney et al. Specifically, multiple user terminals as taught by Hyllander et al. can each make a call request to a common callee in the packet-switched network. The application server 11 then forwards the internet address of the common callee in the received SMS messages to the coupled conference server 152. The conference server 152 responds by preparing a conference call connection and notifying the coupled application server 11 that the connection is prepared. The application server 11 then transmits a SMS that includes a temporary routing number associated with the requested call to the user terminals, thus allowing the user terminals to receive a temporary routing number for a conference call as recited by the independent claims. Thus, each call request as taught by Hyllander et al. may be interpreted as a conference request to an application server as recited by the claims when the application server is coupled to a conference call server 152 that allows calls to be combined into conference calls as taught by Chaney et al. Similarly, the SMS containing the telephone number of the requested call as taught by Hyllander et al. can be interpreted as a temporary routing number for a conference call.

The Applicant further argues that, "one of ordinary skill in the art would not be motivated to make the Hyllander and Chaney combination proposed by the Examiner. Applicants submit that Chaney teaches away because Chaney's conference service relies solely on packet-switched approaches and the PIM server and thus would not be operative with circuit-switched users" (*see Applicant's remarks, page 22*).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the application server 11 as taught by Hyllander et al. is capable of communicating with both a circuit switched network and packet switched network (see figure 2). In fact, Hyllander et al. suggests that the application server 11 allows a mobile user to make an Internet telephone call in a packet switched network (see Hyllander et al., column 2 lines 31-38). Such an Internet telephone call is analogous to the Internet telephone calls provided by conference server 152 as taught by Chaney et al. The conference server 152 as taught by Chaney et al. operates in the packet-switched Internet network 3 as taught by Hyllander et al. and merely requires the Internet address of the desired callee to establish a conference. The internet address can be provided by Application Server 11 which receives the Internet address of the desired callee via SMS. Thus, the Application Server 11 as taught by Hyllander et al. functions as an interface between the circuit-switched calls of the requesting mobile user and the packet-

switched calls of the desired callee. Once the SMS is received, the application server can forward to the internet address to the coupled conference server 152.

For at least the reasons provided above, the Applicant's arguments regarding the independent claim are not persuasive. The Applicant further argues that since the dependent claims depend on the argued independent claims, they are patentable at least by virtue of their dependencies. Since the Applicant's arguments regarding the independent claims are not persuasive, the applicant's arguments regarding the dependent claims are also not persuasive.

### *Conclusion*

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/  
Supervisory Patent Examiner, Art Unit  
2416

BL